DOCUMENT RESUME

ED 199 273 TM 810 172

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TITLE Assessing Experiential Learning in Career Education.
PUB DATE Apr 81
NOTE 13p.: Paper presented at the Annual Meeting of the American Educational Research Association (65th, Los Angeles, CA, April 13-17, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Career Education; *Evaluation Methods; *Experiential Learning; Observation; *Program Evaluation; Self Evaluation (Individuals); Simulation; Work Sample Tests
IDENTIFIERS Paper and Pencil Tests

ABSTRACT

Types of assessment, five assessment techniques, and issues related to assessing experiential learning in career education are discussed. The following six points should be considered before an assessment program begins: (1) assumptions; (2) goals; (3) outcomes; (4) learning environment; (5) role of assessors; and (6) focus. Two basic types of assessment are performance assessment (assessing an experience at it occurs) and outcome assessment (evaluating the result or end product of learning). The primary difference between performance assessment and outcome assessment is when the assessment occurs. The same techniques may be used for both types. Five assessment techniques include direct assessment, self assessment, work sample, simulation, and paper and pencil tests. Before selecting one or a combination of assessment techniques, triangulation (verification of the information obtained) and types of program outcomes should be considered. Experiential learning programs have multiple outcomes such as job skill development, career development, and personal growth. In addition, other factors such as level of realism desired, costs, time available and staff available must be considered when designing the assessment scheme. (RL)

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ASSESSING EXPERIENTIAL LEARNING IN CAREER EDUCATION

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TM 810 172

Paper presented at the 1981 AERA annual meeting

ASSESSING EXPERIENTIAL LEARNING IN CAREER EDUCATION

Learning through experience is not a new idea. Rather, it has existed in various forms throughout history; from prehistoric times where learning occurred through trial and error to modern day secondary schools which often allow students to participate in work settings while learning academic subjects. In an experiential learning situation, the students learn by exploring and doing. They engage in hands-on experiences aimed at expanding an understanding of the utility and applicability of "academic" learning and at developing abilities. In other words, experiential learning involves the total person - his or her cognitive skills, psychomotor skills, sensory perceptions, attitudes, feelings, and abilities.

The steps involved in the learning process are the same whether one learns through traditional methods or experientially. They include:

- Performing or observing action and observing its effects,
- Comprehending and understanding the effects of action in the particular case,
- Performing or observing actions and beginning to see connections between actions and effects over similar circumstances, and
- Applying general principles to any new problem related to it.

The difference in the learning styles stems from the sequence, i.e., experiential learning is largely an inductive process while the majority of traditional classrooms transmit knowledge deductively.

Considerations in Assessing Experiential Learning

Assessing experiential learning programs is important for several reasons. First, it needed to measure the knowledge gained by the student. Second, program effectiveness can be determined through assessment. Last, the assessment may be used as a tool to improve the operation of the program as a whole, as well as the specific experiential activity for each learner. However, planned learning that occurs outside the traditional classroom is often difficult since many experiential learning programs are aimed not solely at teaching a specific skill, but at the personal growth of the learner (e.g., better sense of individual identity, more self confidence).

Most current assessment techniques were developed for and are best suited to measuring outcomes (such as personal growth) which were indirectly included in the traditional curriculum. Therefore, before an assessment program begins, six points should be considered. They are listed below.

1. Assumptions. The assumptions (e.g., nature, purpose, value) underlying experiential learning programs vary from program to program. This variation is reflected in a study of the Executive High School Internships Program (Crowe and Walker, 1979) which revealed that the six original assumptions underlying the program did not reflect the reality of the program or participants' (students, sponsors, coordinators) behavior. As a result of the

researchers' experiences, six alternative assumptions were posited. This research suggests that a clear statement of the assumptions undergirding an experiential learning program is essential in order to design goals with which all persons involved with the program will concur.

2. Goals. The inclusion of program goals related to values and attitudes about work have been less prevalent than those related to traditional programs. Additionally, while goals in the affective domain are appearing, they have not lent themselves to assessment as readily as have traditional goals.

3. Outcomes. The individualized nature of experiential learning programs presents some difficulty for the evaluator who assesses a program solely against the extent to which it meets its goals and objectives. For example, Crowe and Walker (1979) found a difference between the private intention of the participants, program sponsors and program coordinators with the stated program objectives. Therefore, assessments of experiential learning programs should focus on both the intented outcomes (as reflected in the program's goals and objectives) and the unintended outcomes. When studied singularly, they provide a partial view of the program. However, together they provide a more complete view of the program's strengths and weaknesses.

4. Learning Environment. In the experiential program, learning occurs outside the classroom. Thus, assessment techniques selected should allow for varying learning environments.

5. Role of Assessors. In an experiential learning program, there are many "teachers". They can range from a classroom teacher or school based program coordinator to a work setting supervisor

and/or work setting colleagues. In addition, the student may be obtaining multiple skills at a work setting. Therefore, it often requires a global and more comprehensive assessment.

6. Focus. The majority of assessment techniques currently available were designed to measure student achievement in the traditional curriculum. Clearly, it is questionable if these same techniques can be applied to assessing learning obtained through experience.

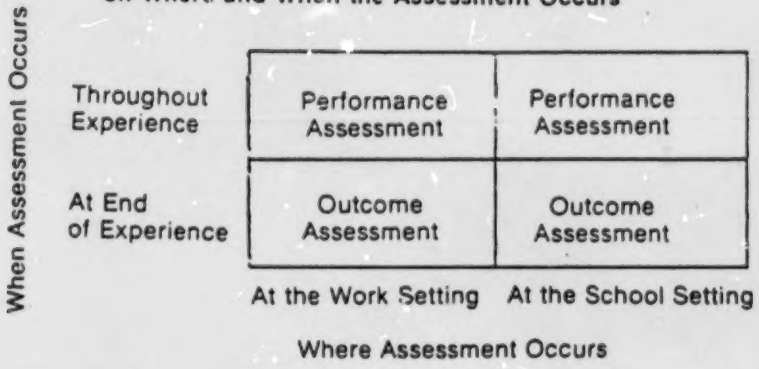
Given these six considerations, the question that arises is: How can experiential learning be assessed? The remainder of this paper identifies types of assessment, five assessment techniques and some related issues that should be considered.

Types of Assessment

In an experiential learning program many techniques may be used to assess an experience. This discussion covers two basic types of assessment: performance assessment and outcome assessment. Briefly, an experience may be assessed as it occurs, or in a setting that resembles the situation in which a specific type of experiential learning is applied (performance assessment). Or, it may be assessed by evaluating the result or end product of the learning (outcome assessment). The primary difference between performance assessment and outcome assessment, then, is when the assessment occurs. Performance assessment evaluates learning throughout the program. Outcome assessment focuses upon the end of the experience and assumes that the outcome reflects the learning that has taken place.

A second important variable in chosing the type of assessment to conduct is <u>where</u> the assessment occurs --- at the work setting or in the classroom. Techniques are available to assess the experience from either perspective. These distinctions are summarized in Figure 1.

FIGURE 1
Choosing an Assessment Method Based on Where and When the Assessment Occurs



Assessment Techniques

The five techniques presented here were selected according to the level of realism present in the assessment. Selections were based on the assumption that assessments conducted at a work setting are more realistic than those done in a classroom. For example, direct assessment is a more realistic assessment than a work sample because the former is conducted at the work setting while the latter is a re-creation of the work setting. However, the work sample is a more realistic assessment than a test because a work sample re-creates the work site. These relationships are identified in Figure 2.

FIGURE 2
Choosing an Assessment Method Based on the Amount of Realism in the Assessment Method

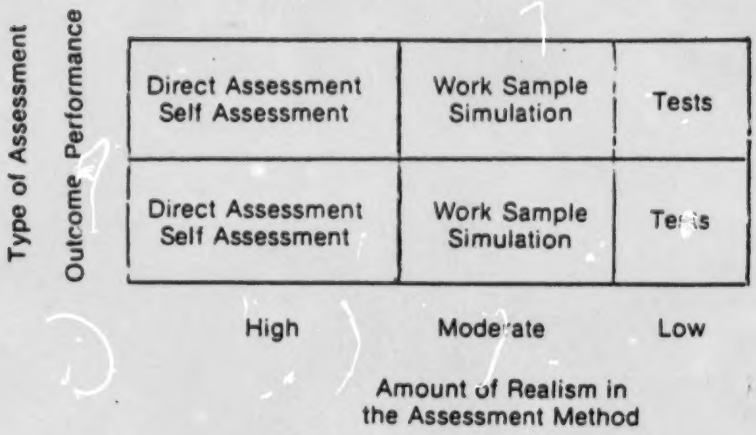


Figure 2 raises three points about assessing experiential learning. First, different assessment techniques may be used to evaluate the experience. Second, each technique has a different level of realism associated with it. Finally, the same techniques may be used for both performance assessment and outcome assessment since they are just two perspective of the same question: What (and how much) was learned in the experiential experience? The technique(s) chosen will depend upon the purpose of the assessment, the level of realism desired, time available, staff available, cost factors, and so forth. Five assessment techniques are highlighted below (for further discussion see Malak, Spirer and Land, 1979).

1. A strong element of realism exists in <u>direct assessment</u> because the student's learning is assessed by examining the actual work through observation. Attention is focused on the work behavior as it occurs at the work setting. For example, in order to assess a student's learning of auto mechanics repair, the experience could be assessed by observing his or her performance at a garage or by observing some outcome that represents his or her

experience at the garage, such as a repaired distributor.

2. Self assessment is a technique by which the student judges his or her own level of accomplishment. It can be conducted formally (e.g., self inventory checklists, standard self assessment tests, skill history forms) or informally (e.g., periodic discussions between the student and his or her mentor). Self assessment can yield insight into the student both for the teacher or administrator and the student.

3. Work Sample is a variation of the direct assessment technique and is most useful in programs were students do productive work (for which they should be paid) and are expected to learn a specific set of work skills. The major difference between the direct assessment and work sample techniques is where the assessment is conducted. Direct assessment is done at the work setting whereas the work sample is conducted away from the work setting. When time nor cost permits direct assessment to be used, a work sample may be appropriate. A work sample attempts to reproduce all, or an important part, of an actual task learned at the work setting (using the same type of equipment found at the work setting). Thus, a student might be asked to perform a task learned (e.g., design a filing system for a set of materials) or analyze a situation and correct its errors (e.g., critiquing and redesigning an existing filing system). The student's learning may be assessed through his or her performance (e.g., how thoroughly he or she analyzes the office information needs before the filing system is redesigned) or through the outcome or work sample (e.g., the filing system).

4. Simulation asks the student to pretend that he or she

is engaged in some real task. The simulator used in aviation classes is a common example of simulation. Like a work sample, simulation is a modification of the direct assessment method. However, while a work sample assesses tangible skill performance, simulation can also address changes in motivations, personalities, and social skills which interact with aptitudes to get a job accomplished. Since a simulation is made up of many interrelated actions and reactions, it is a way of looking at the total picture. For example, a simulation may be used to measure leadership ability or decision-making skills.

5. The least realistic way of assessing a student's learning in an experiential setting is through paper and pencil tests. However, there are times when some aspects of experiential learning may be assessed by administering tests. For example, tests may be used to assess knowledge of basic facts when it is impractical or economically infeasible to use other methods. Tests are especially effective when used in conjunction with other kinds of measures to help verify the information obtained.

Additional Considerations

Before selecting one or a combination of assessment techniques, two factors should be considered: triangulation and program outcomes. First, the information obtained from the assessment - regardless of the technique or techniques chosen - should be accurate. One way to verify the information obtained is through triangulation. Triangulation is the process of obtaining information from several different sources (e.g., student and mentor) or from the same source (e.g, student) using different techniques. Information may be also be triangulated by using

multiple techniques (e.g, direct assessment, self assessment and tests) or by using one technique several times. Another route in triangulation is to assess an experience from both performance and outcome perspectives. Whatever combination is selected, together they will aid in verifying the findings.

Second, program outcomes will provide a framework for determining the perspective and techniques which may be used for an assessment. Simply, different assessment techniques are better suited to different types of outcomes. For example, tangible skill development may be most easily assessed by direct assessment and/or tests while more complex behavior may be better assessed through simulation. The point is that experiential learning programs have multiple outcomes. The single outcome or combination of outcomes to be assessed will determine the assessment techniques to be used. Figure 3 attempts to illustrate these relationships by identifying thee possible outcomes: job skill development, career development and personal growth. All three outcomes may be evaluated from the performance and outcome perspectives.

FIGURE 3
Outcomes and Assessment Methods

Outcomes

Assessment Methods (Outcome Performance)	Job Skill Development	Career Development	Personal Growth
	Direct Assessment Simulation Work Sample Self Assessment	Direct Assessment Self Assessment Interview	Direct Assessment Self Assessment Simulation Tests
	Direct Assessment Work Sample Tests	Direct Assessment Interview	Direct Assessment Tests Simulation

Summary

The assessment of experiential programs is important to gauge the quality and quantity of learning that occurs and the performance of a program. This paper introduces five different techniques - direct assessment, work sample, simulation, self assessment and tests. Each technique may be used to assess an experience from a performance and/or outcome perspective. In addition, other factors such as program outcomes, assessment purposes, level of realism desired, costs, time available, staff available, and accuracy of findings must be considered when designing the assessment scheme. In sum, there is no "rule of thumb" or best procedure that may be used. This paper provides guidelines which should be considered in light of each specific experiential learning program. Above all, evaluation activities are management tools to improve programs. Assessment schemes should be designed with that thought in mind.

NOTES

Crowe, Michael R. and Walker, Jerry P. Evaluation of the Executive High School Internships Program: Executive Summary. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1979.

Malak, Sharon, Spirer, Janet E., and Land, Brenda Pellegrini, Assessing Experiential Learning in Career Education. Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979.